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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,928

09/25/2003

Chun-Li Liu

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2060

23125

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04/27/2005

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EXAMINER

LE, DUNG ANH

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary

Application No.

10/670,928

Applicant(s)

LIU ET AL.

Examiner

DUNG A. LE

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,9-14,19,20,36,37,39,40,44-54,56-61 and 64-73 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) See Continuation Sheet are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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Continuation of Disposition of Claims: Claims subject to restriction and/or election requirement are 1,3-6,9-14,19,20,36,37,39,40,44-54,56-61 and 64-73.

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DETAILED ACTION

Response to Election.

This Office Action is in response to Election filed on 4/4/2005.

Claims 2, 7-8, 15-18, 21-35, 38, 41-43, 45,55 and 62-63.

Claims 1,3, 5, 6, 10, 11, 14, 36, 37, 39,40,44, 50 have been amended.

Claims 64-73 are newly added.

Sets of Claims 1, 11-13, 19-20, 40, 64; 3- 6, 9- 10, 37, 39; 14,36, 66; 44, 46-54 ;
56-61and 67-73 are pending in the present application at the time of examination.

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

a) Species I, e.g. Sets of claims 1, 11-13, 19-20, 40, 64 and 3- 6, 9- 10, 37, 39:

Method for manufacturing SOI template layer without the step of depositing oxide layer on the crystalline structure and remove at least a portion of the oxide.

b) Species II, e.g. Sets of claims 56-61,: Method for manufacturing SOI template layer with the step of depositing oxide layer on the crystalline structure and remove at least a portion of the oxide.

c) Species III, e.g. Sets of claims 14, 36 and 66,: Method for manufacturing SOI template layer with the step of forming a metal layer over the layer, the metal layer is reactive with silicon atoms and heating the metal layer to cause the metal layer to react with silicon atoms in the layer (silicide process).

d) Species IV, e.g. Sets of claims 56-61,: Method for manufacturing SOI template layer with the step of depositing oxide layer on the crystalline structure and remove at least a portion of the oxide.

e) Species V, e.g. Sets of claims 44, 46-54 and 67-73: Method for manufacturing SOI template layer with:

the step of forming material on the crystalline structure, wherein the forming includes using a process that consumes atoms of the first type in a way that injects vacancies into the crystalline structure wherein vacancies recombine with atoms including atoms of the second type (see Independent claim 44).

the step of forming an oxynitride layer over the crystalline structure, wherein the forming includes using a process that consumes a portion of the first semiconductor layer (see Independent claim 67).

2. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claims is finally held to be allowable. Currently, no claim is generic. Applicant is advised that a response to this requirement must include an identification of the species that is elected

consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is all claims are generic is considered non-responsive unless accompanied by an election.


3. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. 1.141. If claims are added after the selection, applicant must indicate which are readable upon the elected species. M.P.E.P. 809.02(a). Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filled petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung A. Le whose telephone number is (571) 272-1784. The examiner can normally be reached on Monday-Friday 8:00am- 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUNG A. LE 
Primary Examiner
Art Unit 2818